



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,909	10/05/2005	Marc Preaudat	LOM-0047	7128
23599	7590	10/13/2006	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			SHEN, BIN	
			ART UNIT	PAPER NUMBER
			1657	

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/522,909

Applicant(s)

PREAUDAT ET AL.

Examiner

Bin Shen

Art Unit

1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 3,4 and 13-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 1655

DETAILED ACTION

The IDS received 2/1/2005, the preliminary amendment received 2/1/2005 have been entered.

Election

Applicant's election with traverse of Group I, claim 1-2, 5-12, and election of species in the reply filed on 8/14/2006 is acknowledged. The traversal is on the ground(s) that there is little, if any additional burden upon the examiner to examine the full scope of the claims. This is not found persuasive because the arguments ("search burden") are not applicable to lack of unity restriction rules (PCT Rule 13.1). Further, the inventions lack the same or corresponding special technical feature as noted in the last office action.

The requirement is still deemed proper and is therefore made FINAL.

Claims 3-4, 13-18 are nonelected and thus are withdrawn from further consideration.

Claims 1-2, 5-12 are presented for examination on the merits with the elected species.

The election of species requirement with respect to the type of heparanase is hereby withdrawn. The rest of the election of species is maintained for the reasons of record.

Specification

1. "Brief description of the drawings" is missing in the specification. Correction is required.
2. The abstract of the disclosure is objected to because the abstract must be a single paragraph. Correction is required. See

Art Unit: 1655

MPEP § 608.01(b). A new abstract on a separate page is required to replace the current abstract, which is the first page of the WO document of the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 recites the limitation "the change" in line 5. There is insufficient antecedent basis for this limitation in the claim.

4. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 contains the trademark/trade names "FLAG/anti-FLAG antibody". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademarks/trade names are used

Art Unit: 1655

to identify/describe the ligand-receptor pair and, accordingly, the identification/description is indefinite. Applicant must remove the trademark from the claim and claim the ligand-receptor pair in generic terms.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 5-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Nicolson et al. (USPN4859581).

Nicolson et al. teach a method for determining endoglycosidase (purified heparanase-see column 21, lines 2-46; and nonpurified heparanase-see column 20, lines 25-44) enzyme activity in a sample, comprising the following steps: bringing a substrate (heparin sulfates or their derivatives-see column 2, line 48; also column 3, line 65 to column 4 line 2) into contact with said sample; measuring the change in the amount of intact substrate, a decrease in amount of this substrate being representative of endoglycosidase activity in the sample. The first donor compound and the second acceptor compound are fluorescent compounds (column 11, lines 4-9), and they are covalently attached to the substrate (column 10, line 34 to column 11, line 9). The substrate can be covalently attached to a member of a first ligand-receptor pair and to a member of a second ligand-receptor pair such as DNP/anti-DNP antibody;

Art Unit: 1655

biotin/avidin (column 8, line 45 to column 9, line 2; also column 11, lines 33-50).

Therefore, the cited reference is deemed to anticipate the instant claims above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nicolson in view of Bazin et al. (Spectrochimica Acta Part A 2001;57:2197-2211).

Nicolson teaches what is above.

Nicolson does not teach that the donor compound is a rare earth cryptate and that the acceptor fluorescent compound is allophycocyanin.

Bazin et al. teach a new class of fluorescent complexes, the rare earth cryptate, used as a fluorescent donor with allophycocyanin as acceptor and its advantages (see abstract and page 2200, section 2.1.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Nicolson's to use rare earth cryptate and allophycocyanin as fluorescent complexes because Bazin teaches that this complexes

Art Unit: 1655

shows an exceptionally high Forster distance R_0 of 9nm, which allows to build up a set of strategies to probe the interactions of biomolecules in biology, particularly for high throughput screening applications (abstract). One would have been motivated to make the modification because Bazin et al. specifically described the application of the fluorescent complexes in enzyme mediated reactions that cleave or modify substrates (page 2206, section 3.2.), and would reasonably have expected success in view of both Nicolson and Bazin's teachings.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Conclusion

7. No claim is allowed.

Certain papers related to this application may be submitted to Art Unit 1636 by facsimile transmission. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 C.F.R. § 1.6(d)). The official fax telephone number for the Group is 571-273-8300. NOTE: If Applicant does submit a paper by fax, the original signed copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

Any inquiry of a general nature or relating to the status

Art Unit: 1655

of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Any inquiry concerning rejections or objections in this communication or earlier communications from the examiner should be directed to Bin Shen, Ph.D., whose telephone number is (571) 272-9040. The examiner can normally be reached on Monday through Friday, from about 9:00 AM to about 5:30 PM. A phone message left at this number will be responded to as soon as possible (i.e., shortly after the examiner returns to her

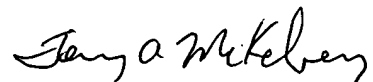
Art Unit: 1655

office).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Terry McKelvey can be reached at (571) 272-0775.

B Shen

Art Unit 1655



TERRY MCKELVEY, PH.D.
SUPERVISORY PATENT EXAMINER